

Remarks

Claims 1-23 are pending. The Examiner indicated allowable subject matter in Claim 5-6 and 11-12. Claims 1, 4-5, 7, 10-11, 13-15, 17-19 and 22-23 are amended for clarity.

The Examiner rejected Claims 1-4, 7-10, 13-23 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,133,874 ("Krasner"). The Examiner states:

Krasner discloses a method and apparatus for acquiring satellite positioning system signals. According to Krasner, an acquisition dwell on a plurality of cells within a time/frequency uncertainty range is performed to detect a set of cells having the largest correlation peaks (column 3); an initial verification dwell on the set of acquired cells above is performed by comparing the peak of each cell to a threshold and retaining those cells having a peak at least as great as the threshold (figure 3). According further to Krasner, there is provided performing an acquisition dwell on another plurality of cells within the time/frequency uncertainty range to detect another set of cells having the largest correlation peaks (figure 9); performing a subsequent verification dwell on the retained cells and an initial verification dwell on the set of detected cells by comparing the peak of each cell to the threshold and retaining those cells having a peak at least as great as the threshold. See figures 3, 4 and 9-10. See also description at columns 10-15. Krasner also discloses a system and method for tracking (i.e., monitoring) the location or position of an object using signals transmitted by GPS satellites.

As previously discussed, Applicants submit that the Examiner's rejection is in error. Nevertheless, Claim 1 has been amended to clearly recite "search cells each defined within a time/frequency uncertainty range." As explained in Appellants' Amendment of May 6, 2005, the term "cell" in Appellants' Specification and claims relate to a time-frequency point in the time-frequency uncertainty domain searched during a GPS signal acquisition. See, generally, for example, Applicants' Specification, at page 1, lines 15-25. Specifically, for example, Applicant's Specification, at page 6, lines 25-28, uses the term "cell" in the context of "a GPS receiver architecture having 511 correlators and a 64-tap FFT." The 64-tap 511 correlators

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are described to have “the capability to simultaneously search 32,704 cells in the time-frequency uncertainty domain.” With the present amendments, the search cells recited in Claim 1 are unambiguously distinguished over the geographical cells, which are service areas in a cellular communication system. In contrast, Krasner’s Figure 9 and cols. 10-15 disclose a GPS signal acquisition method based on an approximate geographical location of the GPS receiver determined using a “cell based information source.” See, Krasner’s Figure 9, and col. 15, lines 29-31. Krasner’s “Summary of the Invention” section, at col. 4, lines 57-65, and in the “Detailed Description,” at col. 10, lines 3-7, specifically point out that Krasner uses the term “cell” to refer to a cellular communications system, in which the cells represent geographical region or location:

In one particular example of the present invention, the approximate location is determined from a cell based information source which correlates an identification of each of various wireless cell sites with an approximate location for objects within a cell serviced by a wireless cell site in a wireless cell based communication system, such as a cellular telephone system.

* * *

FIG. 4 shows an example of a cell based communication system 10 which includes a plurality of cell sites, each of which is designed to service a particular geographical region or location. Examples of such cellular based or cell based communication systems are well known in the art, such as the cell based telephone systems.

(emphasis added)

Thus, Krasner uses the term “cell” to refer to a geographical area. Therefore, the portion of Krasner relied upon by the Examiner neither discloses nor suggests “search cells each defined within a time/frequency uncertainty range.” Moreover, Claim 1 recites the following limitations, which relate to retaining for subsequent verification dwells certain time/frequency points previously achieving high correlation peaks:

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- a) performing an acquisition dwell on a plurality of search cells each defined within a time/frequency uncertainty range to detect a set of search cells having the largest correlation peaks;
- b) performing an initial verification dwell on the set of search cells detected in step a by comparing the peak of each search cell to a threshold and retaining those search cells having a peak at least as great as the threshold;
- c) performing an acquisition dwell on another plurality of search cells within the time/frequency uncertainty range to detect another set of search cells having the largest correlation peaks; and
- d) performing a subsequent verification dwell on the search cells retained in step b and an initial verification dwell on the set of search cells detected in step c by comparing the peak of each search cell to the threshold and retaining those search cells having a peak at least as great as the threshold.

These limitations are neither disclosed nor suggested in Krasner's Figure 9 or cols. 10-15. Moreover, Krasner does not teach retaining time/frequency search points of high peak values from previous dwells for subsequent verification dwells, as recited in Applicants' Claim 1.

In the Final Office Action of July 28, 2005, the Examiner states:

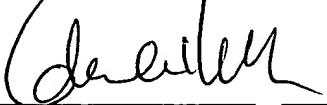
First, it is noted that Krasner discloses a method and apparatus for acquiring satellite positioning signals (title). The method and apparatus of Krasner acquire satellite positioning system (PS) signals in an SPS receiver (abstract). Krasner discloses that information on time of day, approximate receiver location, and satellite positions are used to reduce the time to search an acquire signals from one or more SPS satellites (abstract). The cells used in the Krasner are related to time or frequency in the time-frequency uncertainty range or domain during signal acquisition. See column 3. Various different time-frequency domains are searched during the signal acquisition. Krasner, in column 10, provides an example of the use of the acquired signals in the time-frequency domain or range. See also columns 15 and 16. As pointed above, the cells referred to Krasner relate to or are data used in GPS signal processing.

The Examiner's response is again erroneous. First, Krasner's disclosures at cols. 10 and 15-16 do not relate to use time-frequency domain or range. Even at col. 3, where a time-frequency search is discussed, it neither discloses nor suggests the limitations of Claim 1 recited above.

For the above reasons, Claim 1 and its dependent Claims 2-4 are therefore allowable over Krasner. For substantially the same reasons, Applicants submit that independent Claims 7, 13-14, 18 and 23, and their dependent Claims 8-10, 15-17 and 19-22, are also each allowable over Krasner.

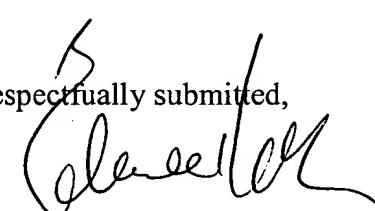
Therefore, all pending claims (i.e., Claims 1-23) are believed allowable over. Reconsideration and their allowance is therefore requested. If the Examiner has any question regarding the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Applicant at (408)-392-9250.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 24, 2006.

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Date of Signature

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